

TENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

WASHIDA, Kimihito
5th Floor, Shintoshicenter Bldg.,
24-1, Tsurumaki 1-chome, Tama-shi
Tokyo 2060034
Japan

JUN 22 2004

Date of mailing (day/month/year) 15 June 2004 (15.06.2004)	
Applicant's or agent's file reference 2F04006-PCT	IMPORTANT NOTIFICATION
International application No. PCT/JP2004/001633	International filing date (day/month/year) 16 February 2004 (16.02.2004)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 17 February 2003 (17.02.2003)
Applicant PANASONIC MOBILE COMMUNICATIONS CO., LTD. et al	

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- (If applicable) An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
17 Febr 2003 (17.02.2003)	2003-038935	JP	02 Apr 2004 (02.04.2004)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 338 90 00

Authorized officer

Hitomi ODAKA (Fax 338 9090)

Telephone No. (41-22) 338 9417

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10 FEB 2005

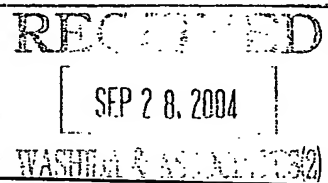
From the INTERNATIONAL BUREAU

To:

10/524213

FIRST NOTICE INFORMING THE APPLICANT OF
THE COMMUNICATION OF THE INTERNATIONAL
APPLICATION (TO DESIGNATED OFFICES WHICH
DO NOT APPLY THE 30 MONTH TIME LIMIT
UNDER ARTICLE 22(1))

WASHIDA, Kimihito
5th Floor, Shintoshicenter Bldg., 24-1, Tsurumaki
1-chome, Tama-shi
Tokyo 2060034
JAPON



(PCT Rule 47.1(c))

Date of mailing (day/month/year) 23 September 2004 (23.09.2004)		
Applicant's or agent's file reference 2F04006-PCT		
International application No. PCT/JP2004/001633	International filing date (day/month/year) 16 February 2004 (16.02.2004)	Priority date (day/month/year) 17 February 2003 (17.02.2003)
Applicant PANASONIC MOBILE COMMUNICATIONS CO., LTD. et al		

IMPORTANT NOTICE

1. **ATTENTION:** For any designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002 (30 months from the priority date), **does apply**, please see Form PCT/IB/308(Second and Supplementary Notice) (to be issued promptly after the expiration of 28 months from the priority date).

2. Notice is hereby given that the following designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, has/have requested that the communication of the international application, as provided for in Article 20, be effected under Rule 93bis.1. The International Bureau has effected that communication on the date indicated below:
26 August 2004 (26.08.2004)

CH

In accordance with Rule 47.1(c-bis)(i), those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

3. The following designated Offices, for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, have not requested, as at the time of mailing of the present notice, that the communication of the international application be effected under Rule 93bis.1:

FI, LU, SE, TZ, UG, ZM

In accordance with Rule 47.1(c-bis)(ii), those Offices accept the present notice as conclusive evidence that the Contracting State for which that Office acts as a designated Office does not require the furnishing, under Article 22, by the applicant of a copy of the international application.

4. TIME LIMITS for entry into the national phase

For the designated Office(s) listed above, and unless a demand for international preliminary examination has been filed before the expiration of 19 months from the priority date (see Article 39(1)), the applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 20 MONTHS from the priority date.

In practice, time limits other than the 20-month time limit will continue to apply, for various periods of time, in respect of certain of the designated Offices listed above. For regular updates on the applicable time limits (20 or 21 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.+41 22 740 14 35

Authorized officer

Yoshiko Kuwahara

Facsimile No.+41 22 338 90 90

PATENT COOPERATION TREATY

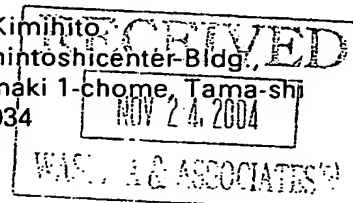
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From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

To:

WASHIDA, Kimihito
5th Floor, Shintoshicenter-Bldg,
24-1, Tsurumaki 1-chome, Tama-shi
Tokyo 2060034
Japan



Date of mailing (day/month/year) 12 November 2004 (12.11.2004)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 2F04006-PCT	
International application No. PCT/JP2004/001633	International filing date (day/month/year) 16 February 2004 (16.02.2004)

1. The following indications appeared on record concerning:

☒ the applicant ☒ the inventor ☐ the agent ☐ the common representative

Name and Address ARATASHI, Hiroyuki	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☒ the name ☐ the address ☐ the nationality ☐ the residence

Name and Address ATARASHI, Hiroyuki	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

☒ the receiving Office ☒ the designated Offices concerned
☐ the International Searching Authority ☐ the elected Offices concerned
☐ the International Preliminary Examining Authority ☐ other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 338.90.90	Authorized officer Patricia Blanchet (Fax 338 9090) Telephone No. (41-22) 338 9655
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(12)特許協力条約に基づいて公開された国際出願

(19) 世界知的所有権機関
国際事務局



(43) 国際公開日
2004 年 8 月 26 日 (26.08.2004)

PCT

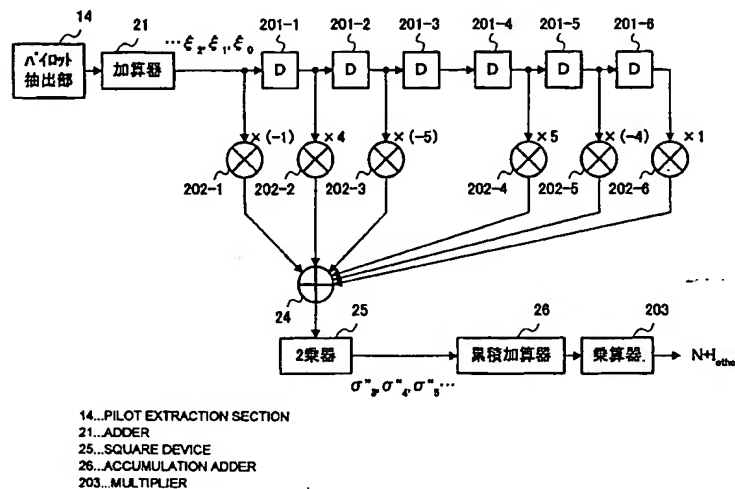
(10) 国際公開番号
WO 2004/073223 A1

- (51) 国際特許分類: H04J 11/00, 1/00 式会社エヌ・ティ・ティ・ドコモ (NTT DOCOMO, INC.); 〒1006150 東京都千代田区永田町二丁目 1 1 番 1 号 Tokyo (JP).
- (21) 国際出願番号: PCT/JP2004/001633
- (22) 国際出願日: 2004 年 2 月 16 日 (16.02.2004)
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語
- (30) 優先権データ: 特願2003-038935 2003 年 2 月 17 日 (17.02.2003) JP
- (71) 出願人 (米国を除く全ての指定国について): パナソニックモバイルコミュニケーションズ株式会社 (PANASONIC MOBILE COMMUNICATIONS CO., LTD.) [JP/JP]; 〒2238639 神奈川県横浜市港北区綱島東4-3-1 Kanagawa (JP). 株
- (72) 発明者; および
- (75) 発明者/出願人 (米国についてのみ): 福岡 将 (FUKUOKA, Masaru). 須増 淳 (SUMASU, Atsushi). 安部田 貞行 (ABETA, Sadayuki). 前田 規行 (MAEDA, Noriyuki). 新 博行 (ARATASHI, Hiroyuki).
- (74) 代理人: 鷺田 公一 (WASHIDA, Kimihito); 〒2060034 東京都多摩市鶴牧1丁目24-1新都市センタービル5階 Tokyo (JP).
- (81) 指定国 (表示のない限り、全ての種類の国内保護が可能): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR,

[続葉有]

(54) Title: NOISE POWER ESTIMATION METHOD AND NOISE POWER ESTIMATION DEVICE

(54) 発明の名称: 雑音電力推定方法及び雑音電力推定装置



(57) **Abstract:** A pilot extraction section (14) extracts a pilot signal from a reception signal. An adder (21) performs in-phase addition of a correlation value of a plurality of pilot signals for each sub-carrier. Delay devices (201-1 to 201-6) temporarily hold one in-phase addition value. Multipliers (202-1 to 202-6) multiply the in-phase addition value output from the delay devices by a predetermined coefficient. The predetermined coefficient reflects the result of a plurality of corrections of the difference of the line fluctuation in different sub-carriers generated when calculating the noise power per one sub-carrier. The respective multiplication results are added by an adder (24) and squared by a square device (25). An accumulation adder (26) accumulates and adds the squared values for all the sub-carriers. The multiplier (203) multiplies the accumulated added value by a predetermined value so as to average it. Thus, it is possible to improve the noise power estimation accuracy even when the adjacent sub-carriers have lowered correlation due to frequency selection fading.

(57) 要約: パイロット抽出部 14 は、受信信号からパイロット信号を抽出する。加算器 21 は、サブキャリア毎に複数のパイロット信号の相関値を同相加算する。遅延器 201-1 ~ 201-6 は、1つの同相加算値を一時保持する。乗算器 202-1 ~ 202-6 は、遅延器から出力された同相加算値に所定の係数を乗算する。所定の係数は、1サブキャリア当たりの雑音電力を算出する際に生じる異なるサブキャリアにおける回線変動の差分を、複数回補正した結果を反映している。それ

NO 2004/073223 A1